LARGE SCALE METHODS OF PRODUCING ADENOVIRUS AND ADENOVIRUS SEED STOCKS

ABSTRACT OF THE DISCLOSURE

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A process for large scale virus production is disclosed, especially large scale adenovirus production. The methods described are preferably adapted to suspension culture of mammalian host cells in a large scale bioreactor where gas sparging becomes essential to provide adequate aeration through the duration of the culture. This methodology includes an elevated concentration of a compound which protects host cells from the shearing effects of gas sparging and agitation as well as utilizing virus seed stocks which have been generated free of cell lysis reagents. The invention also relates to methods of producing these virus seed stocks, which are scaleable and the resultant unclarified virus seed stocks which are concentrated to reduce storage volume for infection of large scale culture and which are free of cell lysis components, such as the detergent Triton X-100 or Polysorbate 80.